

A Report on the Agassiz Flock of Canada Geese

by

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Nelson (1963) has described the Bureau's program for restoration of breeding Canada goose flocks in the north central states. This report will treat only the Agassiz flock.

Attempts have been made at reintroducing Canada geese at the Agassiz National Wildlife Refuge, Marshall County, Minnesota since 1938, or shortly after the inception of the refuge. These attempts were largely unsuccessful until 1955 after goslings and adults were brought in from Seney Refuge. This stock is considered to have been derived from the giant race recently described by Dr. Harold Hanson, (personal communication).

Table No. 1 enumerates annual production by the Agassiz flock from 1955 through 1964. It also provides an estimate of the total free flying flock for these years.

In 1962 the penned flock was discontinued. The 36 geese remaining in the pen were allowed to attain full flight. Nevertheless, they wintered in the pen. However, in 1963 and 1964 nearly all of the geese migrated from Agassiz in November. The general exodus occurred between November 15 and November 19.

Banding of Canada geese at Agassiz prior to 1963 was largely confined to penned birds. Very few free flying geese were banded until July, 1963. At that time, 97 of the large Seney geese were banded as free flyers outside the pen. In 1964 an additional 51 free flyers were

banded. As of March 1, 1965, a total of 21 returns have been received (from 148 bandings). Of these, four were from Sardis Reservoir, Oxford, Mississippi, one was from the vicinity of Arlington, Minnesota, one was from near Fergus Falls, Minnesota; one was from Little Green Isle, Wisconsin, and the balance were from Marshall County, Minnesota, or in the vicinity of the refuge.

These geese have annually migrated from Agassiz since 1955. None have ever wintered there with the exception of those in the pen. The only band returns received which may indicate a southern terminus are the four from Sardis.

The first spring arrivals at Agassiz usually appear during the last week in March. The breeding population at the refuge has averaged 132 pairs since 1962. The largest number of geese observed in the flock was 833 in the fall of 1963 prior to the arrival of migrants.

The Agassiz Refuge comprises approximately 61,000 acres which affords ample sanctuary for this flock. Up to 400 acres are farmed each year which provides browse as well as grain. Most of the feeding areas are at least 2 miles from the boundary of the refuge. The reporting rate from banding indicates that mortality is low.

In 1959 an experimental predator control program was started at the refuge. This involved the removal of mammalian and avian predators from approximately one-third of the refuge. This predator control program continued through 1964. While the control program did not include the entire refuge, it is considered to have had a profound effect in reducing nest predation on Canada geese. It is my opinion that the control of predators contributed substantially to the marked increase by the flock since 1959.

SARDIS RESERVOIR.

I visited Sardis in January, 1965 and discussed these matters

with Bill Turcotte, Chief, Division of Game, and Louis Bayes, Waterfowl Biologist. Together we inspected goose habitat available at Sardis Reservoir. It was agreed that this matter would be reported to the council and after consideration by that body, recommendations would be developed for future management.

Report presented at meeting of
Mississippi Flyway Technical Committee
Council Bluffs, Iowa March 16, 1965

Reference

Restoration of Breeding Canada Goose Flocks in the North Central States
H. K. Nelson, Transactions, 28th North American Wildlife Conference

TABLE NO. I

A History of Production by the Agassiz Flock
of Canada Geese
1955-1964

<u>Year</u>	<u>Estimated Total Production</u>	<u>Penned Flock (Flightless)</u>	<u>Total Free-Flying Flock</u>
1955	50	84	100
1956	80	68	205
1957	90	64	220
1958	40	101	120
1959	87	88	210
1960	160	90	300
1961	300	109	550
1962	165	36*	365
1963	463	None	833**
1964	<u>400</u>	None	665***
Total	1,835		

NOTE: Fall departure (general) fell between November 15 - 19 in 1963 and 1964.

* All penned geese were released.

** 97 geese banded in 1963; 51 in 1964

*** Based on count by H. K. Nelson and H. H. Dill - November 9, 1964.

An Improved Nesting Structure for Canada Geese

It has been clearly demonstrated that Canada geese will accept artificial structures for nesting sites. The attached sketch presents details of one of the more promising designs for a structure that can conveniently be mass-produced in most shops equipped for welding and is easy to erect. In the northern states these structures can be hauled out onto the ice and located as desired. When the ice melts, they drop into position without anchoring.

The sketch is taken from a nest structure built of salvaged material. The net cost for 100 of these in place on the ice was about \$6.75 each, exclusive of cost of steel.

Ice action often damages similar structures which are built on posts driven into the bottom. This design seems to withstand ice action better. Thought should be given to maximum water levels anticipated. The sketch provides for about three feet of freeboard. In locating the structure, make sure that all four pods will settle on level bottom. Snow will sometimes cover emergent vegetation so that one or more of the pods may inadvertently be placed over the vegetation. Then, when the ice melts, those pods in open water will sink deeper, causing the structure to tilt.

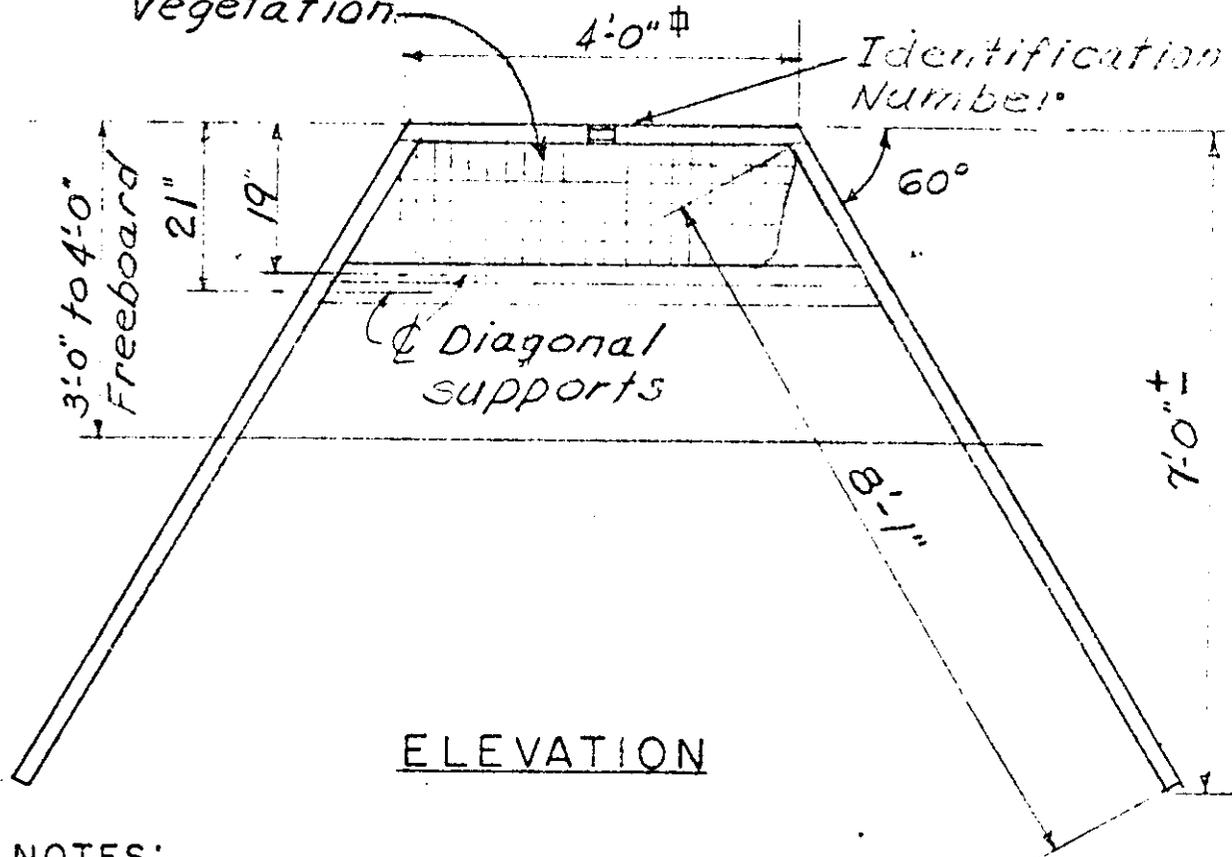
Several of these structures may be "nested" or stacked together for hauling. Individual units are light enough to be carried by two men.

Hay or other vegetation was used for nest material and a stick or short log added on top to prevent this material from being blown away. Hard-stemmed bulrush is recommended for nest material, if available.

It is suggested that the initial nesting structures be located at least 200 yards apart and $\frac{1}{4}$ - $\frac{1}{2}$ mile from the mainland. Bays and points in cattails or bulrush seem to be locations favored by geese. The prescribed distance from the mainland will discourage raccoons. The design of the structure is also intended to assist a goose in defending the nest from predators.

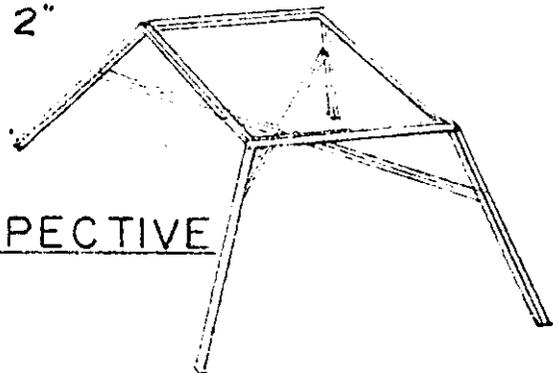
Prepared at Minneapolis, Minnesota
Regional Office by Herbert H. Dill
December 21, 1964

Use woven wire fencing, line with roofing felt and fill with hay or marsh vegetation.



NOTES:

Weld all joints incl. diag. supports at intersection.
 Framing to be 2"x2" steel channel or other similar section.



DILL TYPE
GOOSE NEST STRUCTURE